AMENDMENTS TO THE CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims, in which insertions are indicated by underlining and deletions are indicated by strikeouts or double bracketing.

1. (Currently amended) A computer-implemented method for dynamically determining an appropriate user interface of a plurality of ~~pre-defined~~ predefined user interfaces to be presented to a user of a computing device ~~comprising~~ for presentation of information associated with a task, the method comprising:

employing a processor to execute computer executable instructions stored on a computer readable medium to perform the following acts:

determining context of the user, wherein the context of the user is represented by a plurality of context attributes that each model an aspect of the context;

automatically selecting, without user intervention, one of the plurality of predefined user interfaces, wherein the ~~automatic selection~~ automatically selecting is a function of [[the]] determined cognitive availability of the user and the user context~~, the automatically selecting comprising~~ and comprises determining a quantity of information the user has cognitive availability to receive ~~in a background mode~~ and selecting a user interface including ~~an amount~~ a quantity of ~~background~~ information that is less than or equal to the quantity of information the user has [[the]] cognitive availability to receive; and

presenting to the user information associated with the task~~, the presenting~~ by using the automatically selected predefined interface, wherein, when the user is determined to have cognitive availability for information representing one type of feedback, presenting the automatically selected predefined user interface comprises presenting one visual indicator in peripheral vision of the user.

2. (Canceled)

3. (Original) The method of claim 1 wherein the computing device is a wearable personal computer.

4.-5. (Canceled)

6. (Previously presented) The method of claim 1 wherein the automatically selecting is performed at execution time.

7. (Previously presented) The method of claim 1 wherein the determining and the automatically selecting are dynamically performed repeatedly so that the user interface that is presented to the user is appropriate to current needs.

8. (Previously presented) The method of claim 7 wherein the dynamic determining and the automatically selecting are performed repeatedly so that the user interface that is presented to the user is optimal with respect to the current needs.

9. (Previously presented) The method of claim 7 wherein the determining of the current needs includes at least one of characterizing user interface ("UI") needs corresponding to a current task being performed, characterizing UI needs corresponding to a current situation of the user, and/or characterizing UI needs corresponding to current I/O devices that are available.

10. (Previously presented) The method of claim 7 wherein the determining of the current needs includes characterizing user interface ("UI") needs corresponding to a current task being performed, characterizing UI needs corresponding to a current situation of the user, and characterizing UI needs corresponding to current I/O devices that are available.

11.-12. (Canceled)

13. (Previously presented) The method of claim 1 wherein the automatically selected user interface includes information to be presented to the user and interaction controls that can be manipulated by the user.

14. (Previously presented) The method of claim 1 including monitoring the user in order to produce information about the current context, or monitoring a surrounding environment of the user in order to produce information about the current context, or monitoring the user and the surrounding environment of the user in order to produce information about the current context.

15. (Previously presented) The method of claim 7 wherein the current needs are determined based at least in part on the current context.

16. (Previously presented) The method of claim 1 including customizing the automatically selected user interface based on the user before presenting of the customized user interface to the user.

17. (Previously presented) The method of claim 1 including adapting the automatically selected user interface to a type of the computing device before presenting of the adapted user interface to the user.

18. (Previously presented) The method of claim 1 including adapting the automatically selected user interface to a current activity of the user before presenting of the adapted user interface to the user.

19. (Previously presented) The method of claim 15 wherein the determining of the current needs is based at least in part on the user being mobile.

20. (Currently amended) A computer-readable medium having stored thereon computer executable instructions for carrying out the following acts:

dynamically determining cognitive availability of a user, ~~the cognitive availability is a function of an amount of attention the user uses during a computer-assisted task,~~ the cognitive availability comprising ~~at least one of an~~ a value indicative of expertise of the user~~, an ability to extend short term memory, distractions associated with the user~~;

dynamically determining one or more current needs for a user interface to be presented to the user;

automatically selecting, without user intervention, one of a plurality of predefined user interfaces whose characterized properties correspond to the dynamically determined cognitive availability of the user and current needs, the selecting comprising determining a quantity of information the user has cognitive availability to receive ~~in a background mode~~ and selecting a user interface including ~~an amount~~ a quantity of ~~background~~ information that is less than or equal to the quantity of information the user has [[the]] cognitive availability to receive; and

presenting the selected user interface to the user, wherein when the user is determined to have cognitive availability for information representing two types of feedback, presenting the selected predefined user interface comprises presenting one visual indicator in peripheral vision of the user and presenting an audible indicator.

21. (Original) The computer-readable medium of claim 20 wherein the computer readable medium is a memory of a computing device.

22.-23. (Canceled)

24. (Currently amended) A computing device for dynamically determining an appropriate user interface to be presented to a user of a computing device, the computing device comprising:

a processor;

a memory communicatively coupled to the processor, the memory having stored therein computer-executable instructions configured to dynamically determine an appropriate user interface, including:

a first component capable of, for each of ~~multiple~~ a plurality of predefined user interfaces, characterizing properties of the predefined user interface;

a second component capable of determining during execution one or more current needs for a user interface to be presented to the user, wherein the determining includes determining cognitive load of the user~~, the cognitive load includes a cognitive availability of the user that is~~ as a function of an amount of time the user has between focus tasks, wherein a focus task requires a user's primary attention; and

a third component capable of automatically selecting, without user intervention, during execution one of the defined user interfaces whose characterized properties correspond to the dynamically determined current needs, ~~the selected~~ a user interface for presentation to the user, the complexity of the selected interface being based on the amount of time determined by the second component that the user has between focus tasks, wherein, when the user is determined to have cognitive availability for information representing two types of feedback, presenting the selected predefined user interface comprises presenting one visual indicator in peripheral vision of the user and presenting an audible indicator.

25.-26. (Canceled)

27. (Previously presented) A method for dynamically determining an appropriate user interface to be presented to a user of a computing device based on a current context, the method comprising:

employing a processor executing computer executable instructions stored on a computer readable storage medium to implement the following acts:

determining multiple user interface elements that are available for presentation on the computing device;

characterizing properties of the determined user interface elements;

dynamically determining cognitive availability of the user;

dynamically determining one or more current needs for a user interface to be presented to the user without user intervention;

generating a first user interface for presentation to the user by combining a plurality of the user interface elements determined to be available for presentation on the computing device, the generated first user interface having user interface elements whose characterized properties correspond to the dynamically determined current needs and cognitive availability of the user, the determined cognitive availability being a first cognitive availability and being a cognitive availability for information representing one type of feedback;

presenting the first user interface to the user, wherein presenting the first user interface consists essentially of presenting one visual indicator in peripheral vision of the user;

monitoring the user in order to produce information about the current cognitive ability of the user;

repeating the dynamically determining cognitive availability of the user;

repeating the dynamically determining one or more current needs for a user interface to be presented to the user, without user intervention;

generating a second user interface, the second user interface having user interface elements whose characterized properties correspond to the dynamically determined current needs and cognitive availability of the user, the dynamically determined cognitive availability being a second cognitive availability and being a cognitive availability for two types of feedback; and

presenting the second user interface to the user, wherein, presenting the second user interface consists essentially of presenting one visual indicator in peripheral vision of the user and presenting an audible indicator.

28.-30. (Canceled)

31. (Original) The method of claim 27 including retrieving one or more definitions for combining available user interface elements in an appropriate manner so as to satisfy current needs, and wherein the generating of the user interface uses at least one of the retrieved definitions to combine the user interface elements of the generated user interface in a manner that is appropriate to the determined current needs.

32. (Original) The method of claim 27 including retrieving one or more definitions for adapting available user interface elements to a type of computing device, and wherein the generating of the user interface uses at least one of the retrieved definitions to combine the user interface elements of the generated user interface in a manner specific to the type of the computing device.

33.-43. (Canceled)

44. (Previously presented) A method for dynamically determining requirements for a user interface that is currently appropriate to be presented to a user of a computing device based on a current context, the method comprising:

dynamically determining, without user intervention, at least one value representative of one or more current characteristics of a user interface that is currently appropriate to be presented to the user, the determining based at least in part on the current context, and dynamically determining at least one value representative of cognitive availability of the user, the cognitive availability is a function of an amount of attention the user uses during a computer-assisted task;

identifying at least some of the determined characteristics as requirements for a user interface that is currently appropriate to be presented to the user;

determining a user interface that satisfies the determined requirements based in part on a comparison of the at least one value representative of one or more current characteristics of a user interface and the at least one value representative of cognitive availability of the user; and

presenting the determined user interface to the user,

wherein, when the at least one value representative of cognitive availability of the user indicates cognitive availability for information representing one type of feedback, presenting the selected predefined user interface comprises presenting one visual indicator in peripheral vision of the user.

45. (Canceled)

46. (Previously presented) The method of claim 44 wherein the determining of the current characteristics includes determining characteristics corresponding to a current task being performed, determining characteristics corresponding to a current situation of the user, and/or determining characteristics corresponding to current I/O devices that are available.

47.-56. (Canceled)

57. (Currently amended) A method for dynamically determining characteristics of a user interface that is currently appropriate to be presented to a user of a computing device, the method comprising:

dynamically determining a level of attention which the user can currently give to the user interface based in part on ~~the cognitive availability of the user, the cognitive availability represents~~ at least one of a value characterizing the user's background awareness, a value characterizing the user's task switched attention, and a value characterizing the user's parallel attention;

dynamically determining one or more current characteristics of a user interface that is currently appropriate to be presented to the user based at least in part on the determined level of attention;

determining a user interface, without user intervention, that includes the determined characteristics; and

presenting the determined user interface to the user, wherein, when the user is determined to have cognitive availability for information representing two types of feedback, presenting the

~~predetermined~~ determined user interface comprises presenting one visual indicator in peripheral vision of the user and presenting an audible indicator.

58. (Canceled)

59. (Original) The method of claim 57 wherein the determined level of attention is based on a determined current cognitive load of the user.

60. (Original) The method of claim 57 wherein the determining of the current characteristics is performed without user intervention.

61.-70. (Canceled)

71. (Previously presented) The method medium of claim 20, wherein cognitive availability comprises the user's precognitive state is unavailable.

72. (Previously presented) The method medium of claim 20, wherein cognitive availability comprises the user has enough background awareness available to receive one or more types of feedback or status.

73. (Previously presented) The method medium of claim 20, wherein cognitive load comprises cognitive demand.

74. (Previously presented) The method medium of claim 20, wherein cognitive load comprises cognitive availability.

75. (Previously presented) The method medium of claim 20, wherein cognitive load comprises degree to which working memory is engaged.

76. (Previously presented) The method of claim 27, wherein cognitive availability comprises the user's precognitive state is unavailable.

77. (Previously presented) The method of claim 27, wherein cognitive availability comprises the user having enough background awareness available to receive one or more types of feedback or status.

78. (Canceled)

79. (Previously presented) The method of claim 1, wherein, when the user is determined to have cognitive availability for information representing two types of feedback, presenting the selected predefined user interface comprises presenting one visual indicator in peripheral vision of the user and presenting an audible indicator.

80. (New) The method of claim 1, wherein the automatically selecting, without user intervention, is a function of the determined cognitive availability of the user, the user context and a value characterizing at least one of complexity of the task, urgency of the task, familiarity of the task, and whether steps of the task may be performed in any order.